for supervising APPs (31.6% vs 35.9%). PGY-1s reported lower confidence across all domains (Fig. 2). Confidence did not differ by anticipated post-graduation practice setting.

Conclusion: EM residents report overall confidence in teaching and supervising junior learners, which increases with experience. However, confidence is notably lower for APP supervision. Further research should explore strategies to optimize early educator development and improve confidence in supervising APPs.

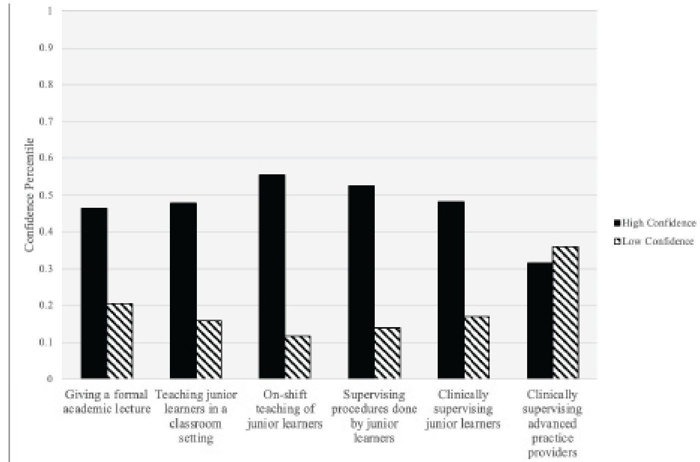


Figure 1. Percent confidence of residents (N=791) as medical educators and supervisors. Confidence is broken down by high confidence (extremely-quite confident) versus low confidence (slightly-not at all confident).

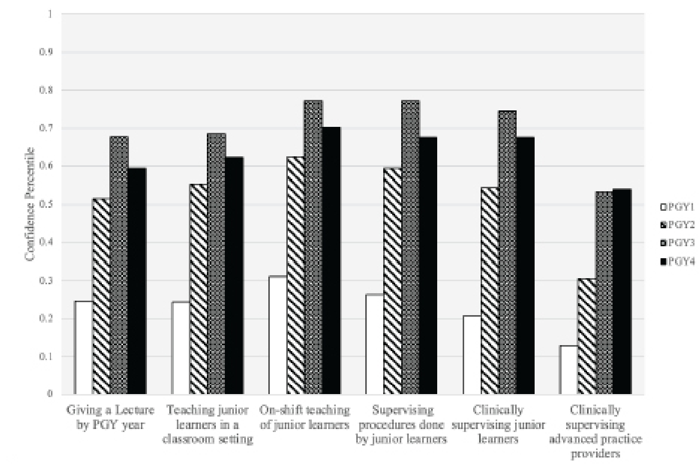


Figure 2. Percent high confidence (extremely-quite confident) of residents as medical educators and supervisors by PGY year (PGY-1 N=292, PGY-2 N=239, PGY-3 N=223, PGY-4 N=37).

70 High-Fidelity Cadaveric Simulation Model for Lateral Canthotomy and Cantholysis

Alexander Bleau, Jennifer Campoli, Susan Wojcik, Conor Young, Kayla Dueland-Kuhn

Background: Lateral canthotomy and cantholysis (LCC) is a vision-saving emergency procedure used to treat orbital compartment syndrome (OCS), often caused by retrobulbar hematoma. Despite its importance, many EM trainees lack confidence in performing LCC due to the rarity of clinical exposure and limitations in existing simulation models.

Objective: To evaluate a cadaveric model that simulates retrobulbar hematoma for lateral canthotomy education in EM trainees.

Methods: Using a technique adapted from Chin et al. (2020, Int Forum Allergy Rhinol.), proptosis was simulated in fresh-frozen cadavers. This prospective observational study used pre- and post-intervention Likert scale surveys to evaluate EM residents' LCC procedural confidence and perceptions during annual procedure labs (2022-2023) at a single academic center. Survey data was analyzed with descriptive statistics and independent statistical testing. Outcomes included prior procedural experience, self-reported procedural confidence, and perceived model fidelity.

Results: 29 participants completed the pre-intervention survey and 25 completed the post-intervention survey. Most participants were PGY-3 residents (66%), with 55% reporting having never performed the procedure. The mean confidence among participants increased from 2.79 ± 1.42 to 4.32 ± 0.99 with a mean difference of 1.53 ± 0.34, $p<0.001$, 95%CI 0.85-2.21. The average rated fidelity of the model without OCS simulation was 2.76 ± 1.05 and the model with OCS simulation was 4.21 ± 0.76 with a mean difference of 1.44 ± 1.12, $p<0.001$, 95%CI 0.977-1.90.

Conclusion: To our knowledge, this is the first study to evaluate the educational impact of a cadaver-based simulation model incorporating a simulated retrobulbar hematoma for EM residents performing LCC. By providing both anatomic realism and pathophysiologic fidelity, this model uniquely improves learner confidence and reinforces the value of realistic simulation for high-stakes procedures like LCC.

71 Individualized Learning Plans for Senior Medical Students Pursuing Emergency Medicine Residency

Laryssa Patti, Amanda Esposito, Daniel Polvino, Mary Rometti

Background: Individualized learning plans (ILPs) identify learner strengths and weaknesses, and develop personalized action plans with faculty input. In 2024-5, we piloted ILPs for students enrolled in the emergency medicine (EM) TTR course. Students completed an individualized self-assessment (ISA), then developed an ILP with EM faculty. We surveyed senior medical students completing the EM TTR course regarding effectiveness and perception of ILPs.

Objectives: We hypothesize the use of ILPs for MS4s can guide their study plans and areas of improvement at the start

of residency training.

Methods: Prior to the TTR course, students completed an online pre-course survey regarding student understanding and perception of ISAs and ILPs and effectiveness of ILPs to guide undergraduate medical education (UME) and graduate medical education (GME) learning. Questions were scored on a 5-point Likert scale. Students completed an ISA and ILP with course leadership. After course completion, students completed a post-course survey. Data was collected from student surveys from March 2024 and 2025.

Results: A total of 24 medical students were included with a 100% survey response rate. Approximately 60% had never completed an ILP. Prior to intervention, students were neutral (average 2.88, standard deviation (SD) 1.33) regarding their previous knowledge of ILPs and thought there was some benefit in completing ILPs in UME (3.69, SD 0.69) and GME (4.04, SD 0.62). Following the course, students reported increased knowledge and comfort with ILPs (4.67, SD 0.48) and benefits of ILPs in UME (4.54, SD 0.51) and GME (4.65, SD 0.58). After implementation, all narrative feedback about ILP participation was positive.

Conclusions: ILP integration into UME is a useful tool for self-directed learning and was perceived positively by this pilot of medical students over two academic years. Further opportunities include expanding to continue ILPs for residents in EM.

Rutgers Robert Wood Johnson
Emergency Medicine Individualized Learning Plan
Transitions to Residency Edition

Instructions: Complete this ILP after reflecting on yourself and your abilities. Think about what you would like the accomplish during your first 6 months of residency, and all you have accomplished over the course of the past four years as a medical student. If possible, review with a mentor to discuss your goals and how best to implement them.

Name:

1. **Below you will find a basic summary of the EM Milestone sub-competencies you will be evaluated on over the next three (or four) years of residency. How prepared do you feel beginning your residency in the following areas?**

	Not at all Prepared 1	Slightly Prepared 2	Moderately Prepared 3	Very Prepared 4	Extremely Prepared 5
Recognize an unstable patient					
Perform a relevant & appropriate H&P					
Communicating results of an EKG & CXR					
Create an appropriate differential diagnosis based on the chief complaint and initial evaluation					
Basic understanding of the different classifications of drugs					
Communicate appropriate disposition plans to patients					
Manage a single patient despite distractions					
Perform basic procedures (splinting, suturing)					
Understand the science behind common EM patient presentations					
Understand treatment for common conditions					
Understand how to report patient safety events					
Understand knowledge of basic quality improvement					
Provide and receive patient sign outs					
Understand different components of health care system (SNF, Rehab)					
Utilizing evidence-based medicine					
Ability to accept feedback					
Ability to demonstrate professional behavior					
Promptly complete required tasks, including administrative paperwork					
Recognizing your own personal and professional wellbeing					
Identify barriers to effective communication					
Request a consult					
Accurately document a patient encounter					

2. **After reflecting on your preparedness using the chart above, describe your top 3 areas for improvement for the first 6 months of residency.**
   a.

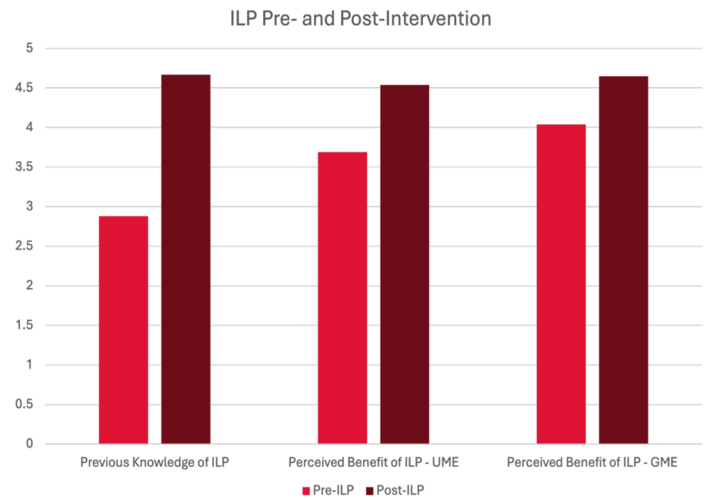
3. **Which 3 common Emergency Medicine topics do you feel least prepared to manage as you enter residency?**

- Abdominal pain
- Abdominal pain in child-bearing age female
- Chest pain
- Dehydration
- CHF
- Pediatric Fever
- DKA
- GI Bleed
- Syncope
- Hypo/Hypernatremia
- Hypo/Hyperkalemia
- Alcohol withdrawal
- Agitation
- Cellulitis
- Shock
- Asthma
- Vaginal bleeding
- Complicated lacerations
- MSK complaints
- Anemia
- Trauma
- Sepsis
- Other: ____________________

4. **What are your top three clinical and/or academic goals for the first 6 months of residency?**
   a.

5. **Based on your above reflections, what learning experiences would be of most value to you in the first 6 months of residency?** *(Although not all experiences may be available at your program possible examples include: case discussion sessions, small group learning sessions, direct observation, simulations, lectures, mentoring, online learning module, elective rotation)*

Learner e-Signature:______________________________ **Date:**__________
Student time required for this ILP: ____________ (minutes)
Faculty mentor e-signature: ___________________________ **Date:**__________
Faculty time required for this ILP: ____________ (minutes)



72 Heartworks to Improve Medical School Point-Of-Care Ultrasound Education

Jodi DeJohn, Yana Feygin, Susan Westneat, Evan Vincent

Background: Point-of-care ultrasound (POCUS) is a valuable tool when evaluating dyspneic patients. Oftentimes medical school students take on an observer role in critically ill dyspneic patients. Limited studies have evaluated the effectiveness of HeartWorks, a simulation-based technology enhanced learning POCUS software, in medical student education.

Objectives: Our study evaluates the efficacy of HeartWorks in medical student education. We hypothesize that HeartWorks will improve knowledge and comfortability of using POCUS during clerkship.

Methods: We conducted an observational prospective cohort study using convenience sampling at a university tertiary referral center. Participants included fourth year medical students rotating in the EM clerkship at the University of Kentucky from July 2025 to October 2025. Participants that did not complete both the pre- and post-surveys were excluded. Interventions included a one hour session on Heartworks focusing on the evaluation of acutely dyspneic and undifferentiated hypotensive patients.

Results: Fifty students met inclusion criteria. Nine students were excluded for not completing both pre- and post-surveys. Differences in comfort using POCUS and student knowledge before and after the simulation were measured. The median total score on student knowledge questions improved after the simulation (Median=8 [7,9] vs Median=7[6,8], $p < 0.001$). Similarly, comfort levels with POCUS and likelihood to use POCUS improved ($p<0.001$).

Conclusions: This study supports that HeartWorks improves student competency in EM POCUS medical student curriculum and improves comfortability and likelihood of